

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): A biochemical analysis unit, comprising:

i) a base plate, which has a plurality of holes,

and

ii) a porous adsorptive material, which is filled in each of the plurality of the holes of the base plate and forms each of a plurality of adsorptive regions,

wherein each of the adsorptive regions comprises a first layer and a second layer,

a mean pore diameter of the first layer is larger than a mean pore diameter of the second layer,

layer,

wherein the first and the second layer of one of said adsorptive regions is connected with a first and a second layer corresponding to an adjacent one of said adsorptive regions at one of surfaces of the base plate, and

the biochemical analysis unit further comprises a signal absorbing layer for absorbing a signal positioned below the base plate such that the first layer, the second layer and the signal absorbing layer is present below the base plate outside of the adsorptive regions and the signal absorbing layer is present below the first and the second layer in the adsorptive regions.

2. (canceled).

3. (previously presented): A biochemical analysis unit as defined in Claim 1 wherein, a ratio of the mean pore diameter of the second layer to the mean pore diameter of the first layer is at most 0.7.

4. (currently amended): A biochemical analysis unit as defined in Claim 2\_1 wherein a ratio of the mean pore diameter of the second layer to the mean pore diameter of the first layer is at most 0.7.

5. (previously presented): A biochemical analysis unit as defined in Claim 1 wherein the base plate comprises a material having radiation attenuating properties and/or light attenuating properties.

6. (currently amended): A biochemical analysis unit as defined in Claim 2\_1 wherein the base plate comprises a material having radiation attenuating properties and/or light attenuating properties.

7. (previously presented): A biochemical analysis unit as defined in Claim 3 wherein the base plate comprises a material having radiation attenuating properties and/or light attenuating properties.

8. (previously presented): A biochemical analysis unit as defined in Claim 4 wherein the base plate comprises a material having radiation attenuating properties and/or light attenuating properties.

9. (withdrawn): A biochemical analysis unit, comprising:

- i) a base plate, which has a plurality of holes, and
- ii) a porous adsorptive material, which is filled in each of the plurality of the holes of the base plate and forms each of a plurality of adsorptive regions,

wherein each of the adsorptive regions is provided with a layer constituted of a material having a comparatively large quantity of a functional group, which is capable of binding with a ligand or a receptor to be bound to the adsorptive region, and a layer constituted of a material having a comparatively small quantity of a functional group, which is capable of binding with the ligand or the receptor to be bound to the adsorptive region.

10. (withdrawn): A biochemical analysis unit as defined in Claim 9 wherein the layers, which constitute each of the adsorptive regions, are connected with the layers, which constitute an adjacent adsorptive region, at one of surfaces of the base plate, and

the biochemical analysis unit further comprises a signal absorbing layer for absorbing a signal, which passes through layers located under the base plate and thus propagates from a certain hole of the base plate toward an adjacent hole of the base plate.

11. (withdrawn): A biochemical analysis unit as defined in Claim 9 wherein, in cases where a density of the functional group in the layer constituted of the material having a comparatively large quantity of the functional group is taken as 1, the density of the functional group in the layer constituted of the material having a comparatively small quantity of the functional group is at most 0.7.

12. (withdrawn): A biochemical analysis unit as defined in Claim 10 wherein, in cases where a density of the functional group in the layer constituted of the material having a comparatively large quantity of the functional group is taken as 1, the density of the functional group in the layer constituted of the material having a comparatively small quantity of the functional group is at most 0.7.

13. (withdrawn): A biochemical analysis unit as defined in Claim 9 wherein the base plate is constituted of a material having radiation attenuating properties and/or light attenuating properties.

14. (withdrawn): A biochemical analysis unit as defined in Claim 10 wherein the base plate is constituted of a material having radiation attenuating properties and/or light attenuating properties.

15. (withdrawn): A biochemical analysis unit as defined in Claim 11 wherein the base plate is constituted of a material having radiation attenuating properties and/or light attenuating properties.

16. (withdrawn): A biochemical analysis unit as defined in Claim 12 wherein the base plate is constituted of a material having radiation attenuating properties and/or light attenuating properties.